WHAT ARE

METALPHOTO PLATES?

. . . the low-cost in-plant method for producing permanent panels, wiring diagrams, schematics, in minutes . . . using standard film negatives and darkroom techniques.

ADVANTAGES of Metalphoto:

✓ Permanence; indestructibility. Can't destroy the image without destroying the metal itself!

- Impervious to salt spray . . . organic solvents, lubricants;
- Impervious to scratching, cracking, crazing, peeling;
- Resistant to fading, fungus, mold, temperature extremes;
- Can withstand repeated scouring; if spray painted, easily restored to original brilliance and legibility.
- Versatility. Reproduce any image with standard darkroom methods.
- Speed of processing. Produce in minutes what once took days or weeks.
- Attractive: Glistening surface; sharp images with fine detail, and can be attractively colored in any of six tints.

They are blank, photosensitive aluminum plates, in which photoimages are imbedded in a layer of aluminum oxide beneath a sapphirehard anodized layer. Not a surface coated emulsion, but imbedded in metal beneath a smooth, polished surface impervious to heat, salt, weather, abrasion!

HOW are they used?

Anything which can be photographed can be reproduced permanently in Metalphoto plates. Ideal for instrument panels, dials, instructions, labels, signs, exterior photographs, plaques, panelfronts, etc.



- LOW COST less than other competitive processes because materials are relatively inexpensive and special skills or training are not necessary.
- WORKABILITY. Processed plates may be cut, drilled, shaped and cold-formed in a wide range of operations.
- DIMENSIONAL STABILITY. Unaffected by humidity, aging, warping. Image dimensions vary only by the thermal expansion and contraction of the metal itself: very slight.
- DETAIL: degree of resolution surpasses all other known photographic materials; permits extreme reduction without loss of detail.

TYPICAL USERS OF METALPHOTO: Ansco Division of General Aniline and Film Corp., Avco Mfg., Bausch & Lomb, Bendix, Bethlehem Steel, Cleveland Museum of Art, Convair and Electric Boat Divisions of General Dynamics, Eastman Kodak, Erie Railroad, Federal Telecommunications Labs Division of ITT, General Electric, Ingalls Shipbuilding, Iron Fireman, George J. Mayer, Newport News Shipbuilding, New York Shipbuilding, Texas Nameplate, Thompson Ramo Wooldridge, University Hospital (Cleveland), Warner & Swasey, Western Electric, Westinghouse and White Motor.



HOW METALPHOTO PLATES ARE PROCESSED:

Standard film negatives and darkroom procedures are used, as with ordinary photographic paper. Easily processed in company photographic department or by any local photographic agency.

TO PRINT: use any contact printing frame; place film negative on a sensitized Metalphoto plate and expose 10 to 40 seconds. Immerse in water, develop, rinse and fix in conventional manner.

TO TONE: and for jet-black images against metallic-white background, immerse in bath of Metalphoto Image Toner for 3 to 5 minutes.

TO COLOR: immerse in proper Metalphoto Chemical Color prior to sealing. Your choice of red, green, gold, copper or blue tints.

TO ENLARGE: merely use greater light intensity than in standard enlargers; using photoflood bulbs and conventional enlarging techniques.

TO SEAL the image permanently, immerse the plate briefly in boiling water. This is the only operation that differs from the paper photographic process.

TO SPEED PRODUCTION PRINTING: use multiple negatives to obtain many final units from a single plate. This can keep production high and costs low; processed plates are easily cut apart when finished.

TRIAL KITS ARE AVAILABLE:

Prove to yourself the merits of METALPHOTO plates for your particular needs and potentials; try a few in your own darkroom. Kits contain instructions and everything you need: test plates, chemicals, and all: Kit #10, with a dozen 4x5" test plates . . . \$10. Large kit with small and large (8x10") plates and 5 tint colors ... \$27.25. Money back if not satisfied for any reason. Send for trial kit today.



METALPHOTO CORPORATION

18531 South Miles Road





Metalphoto

Photosensitive Aluminum Plates

The New Concept of Permanent Photographic Reproductions in Anodized Aluminum Plates



METALPHOTO CORPORATION

18531 SO. MILES RD. . CLEVELAND 28, OHIO

Telephone: 475-0555

WESTERN UNION - TELEX 098-478 - METLPHOTO WVHT

METALPHOTO PLATES



Metalphoto plates are photosensitive anodized aluminum plates which can be converted into practically any product imaginable, such as precision dials, panel fronts, instruction panels, commemorative award plaques, schematics, I.D. badges . . . This list can go on endlessly.

However, one point we would like to make clear is that Metalphoto plates are processed with no more effort than used to print a wallet photo from your favorite negative.

A negative, standard photographic chemicals and techniques used with Metalphoto plates will produce a permanent photographic reproduction. The image is locked in a clear, glass-like sapphire-hard, fully anodized layer. Metalphoto has been thoroughly tested by both government and industry and found to be, because of this layer, resistant to fire, acid, salt spray, abrasion, corrosion and sunlight, all of which would efface or destroy similar products.

It takes no special skill and requires no handling of corrosive or dangerous chemicals to quickly convert Metalphoto into any one of a number of useful and cost saving products.

METALPHOTO STOCK NUMBERING SYSTEM

F-Standard Cut Plate, one side printable

U-Econopak Plate, one side printable

K—Standard Cut Plate, both sides printable

UK—Econopak Plate, both sides printable

4 middle digits denote plate size

2 end digits denote thickness of plate, as follows:

40—.003" thick 32—.008" thick 28—.012" thick 24—.020" thick 20—.032" thick

14—.064" thick 8—.125" thick

Number in parenthesis following stock number denotes number of plates per box.

EXAMPLE: UK-1012-24 (100)

Econopak, both sides printable, size 10"x12", .020" thick, 100 plates per box

NOTE:

To assure best handling of your order please specify stock number and number of plates per box.

All prices in this catalog apply to commercial specifications and cover sizes, thicknesses etc. which are produced commercially and to commercial tolerances.

Prices are F.O.B. our plant, Cleveland, Ohio, and are subject to change without notice.

State, local, or federal tax not included in the prices listed.

TERMS-NET 30 DAYS

METALPHOTO PLATES

CUT PLATES - ONE SIDE PRINTABLE

	SIZE 4	/" x	5"	SIZE 8	8" x 10" SIZE 10" x 12			12"	
THICKNESS	STOCK No.	PLATES Per Box	PRICE Per Box	STOCK No.	PLATES Per Box	PRICE Per Box	STOCK NO.	PLATES Per Box	PRICE Per Box
.003"	F-0405-40 (12)	12	\$ 5.50	F-0810-40 (12)	12	\$17.00	F-1012-40 (12)	12	\$24.00
.008"	F-0405-32 (6)	6	\$ 4.25	F-0810-32 (6)	6	\$15.90	F-1012-32 (6)	6	\$21.10
.012"	F-0405-28 (6)	6	4.70	F-0810-28 (6)	6	16.75	F-1012-28 (6)	6	23.10
.020"	F-0405-24 (6)	6	4.85	F-0810-24 (3) F-0810-24 (12)	3	9.65 29.50	F-1012-24 (3) F-1012-24 (12)	3 12	13.20 42.75
.032"	F-0405-20 (6)	6	6.30	F-0810-20 (6)	6	20.40	F-1012-20 (6)	6 -	28.50
.064"	F-0405-14 (3)	3	4.90	F-0810-14 (3)	3	14.10	F-1012-14 (3)	3	19.95

TWO SIDES PRINTABLE PLATES

For two sides printable plates, add 20% to the price of the one side printable plates and change catalog number prefix from "F" to "K."

Metalphoto plates are most widely used in the .020" thickness.

When in doubt as to what thickness to use, we suggest the .020" thickness.

QUANTITY DISCOUNT

Quantity discounts are available on the METALPHOTO cut plates listed on this page only. On orders specifying shipments of these items to one place at one time, discounts may be made according to this schedule.

TOTAL VALUE OF ITEMS LISTED ON THIS PAGE		DISCOUNT
\$100—\$299		10%
	···	
\$1,000 and over		20%

Please note that this discount schedule does not apply to chemicals, Trial Kits or other items specified on the following pages of this catalog.

TRIAL KITS

Stock Number
TRIAL KIT NO. 10

Price \$10.00

Metalphoto plates can be used for a great many time and cost saving products. In order to permit the new user to do research and experimental work, we package this kit which contains everything necessary to let you start with the least amount of time involved.

12	4" x 5" Metalphoto Plat 1" x 5" Test Strips	tes	
1	Chemical Image Toner	(1	at.
1	Developer		qt.
1	Fixer		qt.
			.,

Also contains processed sample and simplified instruction sheet.

Stock Number
TRIAL KIT NO. 25

Price \$27.25

This kit is designed for the user to apply background color to his Metalphoto plates. A selection of plate sizes is included as well as processing chemicals and five Metalphoto Chemical Colors.

12	4" x 5" Metalphoto Plates
3	8" x 10" Metalphoto Plates
6	1" x 5" Test Strips
1	Chemical Image Toner (1 qt.
1	Developer (1 qt.
1	Fixer (1 qt.
5	Metalphoto Chemical Colors

⁽¹ pkg. each Gold, Copper, Red, Green and Blue)
Complete processing instructions enclosed.

Metalphoto Econopak Plates

STANDARD QUANTITY PACKAGES

METALPHOTO ECONOPAK plates are supplied with full printable area designated. They are untrimmed and as shipped have a tab on one end—convenient for darkroom handling and hanging.

ECONOPAK is the lowest cost way of buying METALPHOTO plates in larger quantities.

	PRINTABLE AREA									
	10" >	c 12'	,	12" >	12" x 20"			20" x 24"		
THICKNESS	STOCK PLATES PRICE PER BOX		STOCK NO.	PLATES Per Box	PRICE Per Box	STOCK NO.	PLATES Per Box	PRICE Per Box		
.008"	U-1012-32 (100)	100	\$225.00	U-1220-32 (3) U-1220-32 (100)	3 100	\$ 24.75 510.00	U-2024-32 (3) U-2024-32 (50)	3 50	\$ 47.25 515.00	
.012"	U-1012-28 (100)	100	247.50	U-1220-28 (3) U-1220-28 (100)	3 100	27.45 555.00	U-2024-28 (3) U-2024-28 (50)	3 50	50.35 560.00	
.020"	U-10!2-24 (100)	100	264.00	U-1220-24 (3) U-1220-24 (100)	3	28.05 580.00	U-2024-24 (3) U-2024-24 (50)	3 50	51.75 585.00	
.032"	U-1012-20 (60)	60	193.30	U-1220-20 (3) U-1220-20 (60)	3 60	31.10 414.00	U-2024-20 (3) U-2024-20 (30)	3 30	57.85 417.00	
.064"	U-1012-14 (30)	30	140.25	U-1220-14 (3) U-1220-14 (30)	3 30	37.60 274.95	U-2024-14 (3) U-2024-14 (15)	3 15	73.55 288.75	

THICKNESS	PRINTABLE AREA					
	24" x 30"			24" x 40"		
	STOCK No.	PLATES Per Box	PRICE Per Box	STOCK NO.	PLATES Per Box	PRICE Per Box
.032"	U-2430-20(3) U-2430-20(15)	- 3 15	\$ 93.00 318.00	U-2440-20(3) U-2440-20(15)	3	\$124.00 424.00
.064"	U-2430-14(3) U-2430-14(9)	3 9	\$116.25 275.25	U-2440-14(3) U-2440-14(9)	3 9	\$155.00 367.00

For two side printable plates, add 20% to the one side printable price and c h an g e catalog number prefix from "U" to "UK."

SPECIAL SIZES

Prices for special size, special thickness, or special packaging for Metal-photo plates other than those listed in the catalog can be obtained by writing the factory.

1/8" METALPHOTO PLATES

(For Standard Relay Rack Panels)

QUANTITY DISCOUNT

The following quantity discounts are allowed on Metalphoto Econopak plates. Orders must specify shipment to one place at one time, but any combination of sizes in standard packaged quantities may be included to make up the total value.

\$ 1,500-\$ 3,001-		\$15,001-\$20,000 20,001- 25,000	11%
7,000- 10,001-			

	PRINTABLE	Box of 3 4 to 12 Plat		13 Plates or More		
STOCK NO.	AREA	MINIMUM ORDER	Price of Box of 3 plus this Price per each Plate in excess of 3	THIS Plus	This Price per each Plate in excess of 12	
U-0519-8	51/4×19	\$29.50	\$ 7.50	\$ 96.75	\$ 6.30	
U-0719-8	7×19	35.75	9.75	121.75	8.40	
U-1019-8	10½×19	48.25	13.75	172.00	12.60	
U-1419-8	14×19	60.75	18.00	222.00	16.80	
U-1719-8	17½×19	73.25	22.25	272.25	21.00	
U-2119-8	21x19	86.00	26.50	322.75	25.20	
U-1012-8	10×12	32.00	8.75	110.75	7.60	
U-1220-8	12×20	55.00	16.25	201.25	15.00	

These Plates are Metalphoto Econopak Style

Furnished Oversize - Trim Area on All Sides



METALPHOTO CORPORATION

18531 SO. MILES RD. • CLEVELAND 28, OHIO

Telephone: 475-0555

NEW METALPHOTO SIZES

ECONOPAK

	24">	<u>< 30''</u>	
		Plates	Price
Thickness	Stock No.	Per Box	Per Box
. 020''	U-2430-24 (3)	3	\$ 78.65
. 020''	U-2430-24 (30)	30	> 535.50
	24" x	40''	
		Plates	Price
Thickness	Stock No.	Per Box	Per Box
.020"	U-2440-24 (3)	3	84.80
. 020''	U-2440-24 (30)	30	714.00
	10" x	12''	
		Plates	Price
Thickness	Stock No.	Per Box	Per Box
.003	U-1012-40 (100)	100	164.00

1/8" METALPHOTO PLATES

		Box of 3	4 to 12 Plates		Plates or More
	Printable	Minimum	Price of Box of 3 plus this Price per each		This Price per each
Stock No.	Area	Order	Plate in excess of 3	This Plus Amount	Plate in excess of 12
U-0319-8	3 1/2 x 19	15.75	5.00	60.75	4.60
U-2024-8	20×24	103.70	31.95	390.50	29.50
U-2430-8	24×30	194.40	58.30	719.25	55.10

Same Quantity Discount applies as shown on Metalphoto Econopak Plates in Metalphoto Catalog effective 2/1/63



METALPHOTO

The chemicals and other items listed here are tailored to give best results in processing Metalphoto plates. We have compiled this list even though many of them are standard photographic items, and are available from most well stocked photo dealers.

Chemicals

METALPHOTO	DEVELOPER DM-2-1 —8 0 DM-2-4 —1 0 DM-2-20—1 8	oz. dilutes to 1 quart	\$.55 1.20
	L DM-2-20—1 g	gallon dilutes to 5 gallons	4.50
	Developer and Fixer packaged in ha Metalphoto developer especially compo		
	DM-44	<u> </u>	
	In the past, recommended developers have been worked well for Metalphoto processing. Metalph compounded a totally new single purpose develop Metalphoto plates.	oto Corporation research team has now	
	DM-44-1 —1	quart working strength	\$. 75
METALPHOTO	DEVELOPER DM-44-4 —1	gallon working strength	1.65
	DEVELOPER DM-44-1 —1 DM-44-4 —1 DM-44-20 —5	gallons working strength	6 .00
METALPHOTO	FIXER	z. dilutes to 1 quart	\$.45 95 3.15
	METALPHOTO CHEMICA	L IMAGE TONER	
Supplied in two bottles	to make working solution.	Used to intensify image and insure ric	h black legend.
CT-100-1 —1 Qua	art Size—dilutes to 1 quart of working so	olution	\$ 1.95
	lon Size—dilutes to 1 gallon of working		
	lon Size—dilutes to 5 gallons of working		
	For larger quantities of Chemical Image To be happy to supply you with formulas for m	oner, write the factory and we will	
METALPHOTO	CHEMICAL COLORS		.ea. .95
Supplied in packs of de-	y powdor to make 1 cells of weeking at the	COLD	
	y powder to make 1 gallon of working solution. ne background of METALPHOTO plates.	GOLD COPPER	No. MT-110 No. ND-120
		33.12.1	
		RED	No. ZR-130
		RED GREEN	
	AVAILABLE IN FIVE COLORS		No. ZR-130



METALPHOTO SEALING ADDITIVE

For the maximum in abrasion and corrosion resistance, Metalphoto plates should be sealed in an acetate sealing solution. We have packaged one of the better formulas for your convenience in one and five gallon unit sizes.

	\$1.70 quart dilutes to one gallon working solution.
SA-200-5	1 gallon dilutes to 5 gallons working solution.

TRIAL KITS

Stock Number
TRIAL KIT NO. 10

\$10.00

Stock Number
TRIAL KIT NO. 25

Price \$27.25

Metalphoto plates can be used for a great many time and cost saving products. In order to permit the new user to do research and experimental work, we package this kit which contains everything necessary to let you start with the least amount of time involved.

12 4" x 5" Metalphoto Plates
3 1" x 5" Test Strips
1 Chemical Image Toner (1 qt.)
1 Developer (1 qt.)
1 Fixer (1 qt.)

Also contains processed sample and simplified instruction sheet.

This kit is designed for the user to apply background color to his Metalphoto plates. A selection of plate sizes is included as well as processing chemicals and five Metalphoto Chemical Colors.

12 4" x 5" Metalphoto Plates
3 8" x 10" Metalphoto Plates
6 1" x 5" Test Strips
1 Chemical Image Toner (1 qt.)
1 Developer (1 qt.)
1 Fixer (1 qt.)
5 Metalphoto Chemical Colors

(1 pkg. each Gold, Copper, Red, Green and Blue) Complete processing instructions enclosed.

CARTRIDGE DEIONIZER

\$9.75

Deionized water on tap—will purify tap water and produce the equivalent of single distilled water for make-up of solutions and sealing finished Metalphoto plates for pennies a gallon. This throw-away type cartridge changes color as it becomes depleted. Five gallons per hour capacity. Attaches to any standard water faucet.

WALL BRACKET FOR DEIONIZER

\$7.50

Wall bracket including flow rate control valve, inlet hose with faucet adapter, and outlet tubing with a plastic ell.

METALPHOTO SEALING TANK

\$27.50

Custom built for sealing Metalphoto plates. An upright tank 4"x11" by 15" deep. It can be placed on any one or two burner hotplate for heating. Plates sealed upright can be touching each other, therefore this tank can seal a good quantity of plates from size 4"x5" up to 10"x12" Econopak plates. These tanks can also be used for developing and fixing Metalphoto plates. Not to be used in toning step unless plastic lined.

Prices f.o.b. our plant Cleveland, Ohio, net 30 days.

Write for our Accessory and Equipment Catalog, if you haven't one in your file.



METALPHOTO CORPORATION

18531 SOUTH MILES ROAD

CLEVELAND 28, OHIO

Telephone: 475-0555



Metalphoto Q Plates

The final step in processing standard Metalphoto plates has been to seal the plate in hot water. The Metalphoto Q plate eliminates the necessity of heat seal, which simplifies the processing.

Metalphoto Q plates are processed the same as standard Metalphoto plates. After toning, the surface of the Metalphoto Q plate is sprayed with Metalphoto Q-Seal. Excess Q-Seal is wiped off the plate with a clean cloth and the plate is ready for use.

A thin, even coating of a clear, spray lacquer, or enamel, may also be used. Either a glossy or dull finish can be produced by this technique.

A trial kit, METALPHOTO Quick-Kit ± 12 , is available for testing Metalphoto Q. The contents of this Kit are listed below.

METALPHOTO Q PLATES

CUT PLATES - ONE SIDE PRINTABLE

Size 4" x 5"				Size 8" x 10"			Size 10" x 12"		
THICKNESS	STOCK No.	PLATES Per Box	PRICE Per Box	STOCK No.	PLATES Per Box	PRICE Per Box	STOCK No.	PLATES Per Box	PRICE Per Box
.008	0405-8 (6) QSC	6	\$4.25	0810-8 (6) QSC	6	\$15.90	1012-8 (6) QSC	6	\$21.10
.020	0405-20 (6) QSC	6	4.85	0810-20 (3) QSC 0810-20 (12) QSC	3 12	9.65 29.50	1012-20 (3) QSC 1012-20 (12) QSC	3 12	13.20 42.75
.032	0405-32 (6) QSC	6	6.30	0810-32 (6) QSC	6	20.40	1012-32 (6) QSC	6	28.50
.063	0405-63 (3) QSC	3	4.90	0810-63 (3) QSC	3	14.10	1012-63 (3) QSC	3	19.95

TWO SIDE PRINTABLE PLATES ARE AVAILABLE ON SPECIAL ORDER

Normal Delivery for 2 Side Printable Plates, Two Weeks After Receipt of Order

QUANTITY DISCOUNT

Quantity discounts are available on the METALPHOTO Q cut plates listed on this page only. On orders specifying shipments of these items to one place at one time, discounts may be made according to this schedule.

TOTAL VALU						DISCOUNT
\$100	\$299	,	 	 	 , .	 10%
\$300	\$999)	 	 	 	 15%
\$1,000	and	over	 	 	 	 20%

Please note that this discount schedule does not apply to chemicals, Trial Kit or other items specified on this sheet.

TRIAL KIT

Stock Number Price
QUICK KIT NO. 12 \$10.95

This kit contains sufficient plates for trial use for small production runs. Everything required to take advantage of this new type of Metalphoto is included.

12 4" x 5" Metalphoto Q Plates

3 1" x 5" Test Strips

I Chemical Image Toner (1 qt.)
I Developer (1 qt.)

1 Fixer (1 qt.)
1 Q-Seal (16 oz.)

Also contains processed sample and simplified instruction sheet.

METALPHOTO Q-SEAL QS-1

16 oz. aerosol spray can \$1.95

METALPHOTO Q ECONOPAK PLATES

STANDARD QUANTITY PACKAGES

METALPHOTO Q ECONOPAK plates are supplied with full printable area designated. They are untrimmed and as shipped have a tab on one end—convenient for darkroom handling and hanging.

ECONOPAK is the lowest cost way of buying METALPHOTO Q plates in larger quantities.

PRINTABLE AREA										
	Size 10	" x 1	2"	Size 20" x 24"						
THICKNESS	STOCK NO.	PLATES Per Box	PRICE Per Box	STOCK NO.	PLATES Per Box	PRICE Per Box				
.008	1012-8 (100) QSL	100	\$225.00	2024-8 (3) QSL 2024-8 (50) QSL	3 50	\$ 47.25 515.00				
.020	1012-20 (100) QSL	100	264.00	2024-20 (3) QSL 2024-20 (50) QSL	3 50	51.75 585.00				
.032	1012-32 (60) QSL	60	193.30	2024-32 (3) QSL 2024-32 (30) QSL	3 30	57.8 5 417.00				
.063	1012-63 (30) QSL	30	140.25	2024-63 (3) QSL 2024-63 (15) QSL	3 15	73.55 288.75				

TWO SIDE PRINTABLE PLATES ARE AVAILABLE ON SPECIAL ORDER

Normal Delivery for 2 Side Printable Plates, Two Weeks After Receipt of Order

SPECIAL SIZES

Prices for special size, special thickness, or special packaging for Metalphoto Q plates other than those listed in the catalog can be obtained by writing the factory.

QUANTITY DISCOUNT

The following quantity discounts are allowed on Metalphoto Q Econopak plates. Orders must specify shipment to one place at one time, but any combination of sizes in standard packaged quantities may be included to make up the total value.

\$ 1,500-\$ 3,000 3% 3,001- 7,000 5%	20,001- 25,00013%
7,001- 10,000 7%	
10,001- 15,000 9%	



METALPHOTO CORPORATION

18531 SOUTH MILES ROAD • Area Code 216-475-0555 • CLEVELAND, OHIO 44128

Please send me	Metalphoto	Trial Kit	No. 10	@	\$10.00	each
and	Metalphoto	Trial Kit	No. 25	@	\$27.25	each
NAME			Titl	e		
COMPANY						
ADDRESS				****************		
CITY		ZONE_	ST	ATE_		
The No. 10 Kit co developer and fixe		4'' × 5'', 3	3 test st	rips,	image	toner,
The No. 25 Kit costrips, image toner				8''	× 10",	5 test
☐ Check accompa	nnies order.	Please	bill me	•		





BUSINESS REPLY CARD

FIRST CLASS PERMIT NO. 13184

CLEVELAND, OHIO

METALPHOTO CORPORATION

18531 SOUTH MILES ROAD CLEVELAND 28, OHIO

